

Curriculum Vitae
CHRISTA D. PETERS-LIDARD, Ph.D.
Physical Scientist
Hydrological Sciences Laboratory
NASA Goddard Space Flight Center
Code 617, Greenbelt, MD 20771 USA
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christa.peters@nasa.gov

I. EARNED DEGREES

Ph.D., Civil Engineering and Operations Research (now Civil and Environmental Engineering), Program in Water Resources, Princeton University, Princeton, New Jersey, January 1997.
Dissertation: "The Effect of Land Surface Heterogeneity on Land-Atmosphere Interactions"
Advisor: Prof. Eric F. Wood

M.A., Civil Engineering and Operations Research, Princeton University, June 1993.

B.S., Geophysics , Summa Cum Laude, Minor: Mathematics, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, Virginia, May 1991.

II. EMPLOYMENT

GS-15 Physical Scientist NASA/GSFC Hydrological Sciences Laboratory
May, 2012 – present.

Duties: Serve as PI on research and applications projects including PMM science team, transitioning the award-winning Land Information System (LIS; <http://lis.gsfc.nasa.gov>) for research and applications with partners at the Air Force Weather Agency, NOAA/NCEP, USACE, USDA, NWS/OHD, NOHRSC and USGS/FEWS-NET. Currently leading NASA AIST- and MAP-funded projects including the NASA Unified WRF (NU-WRF).

GS-15 Supervisory Physical Scientist (Lab Chief) NASA/GSFC Hydrological Sciences Laboratory
(formerly Branch)
August, 2005 – May, 2012.

Duties: Supervise 10 Civil Servant scientists and 20-30 contractors and research scientists. Responsible for \$2M+ annual budget and coordination of NASA- and externally funded program of earth and space science research and applications. Continue to serve as PI on research and applications projects including PMM science team, transitioning the award-winning Land Information System (LIS; <http://lis.gsfc.nasa.gov>) for research and applications with partners at the Air Force Weather Agency, NOAA/NCEP, USACE, USDA, and NWS/OHD and NOHRSC. Currently leading a NASA MAP-and NASA-NEWS-funded projects with Dr. W-K Tao in which LIS is coupled to mesoscale (WRF) and global cloud resolving (MMF) models.

GS-14 Physical Scientist, NASA/GSFC Hydrological Sciences Branch,
August, 2004 – August, 2005.

Duties: Lead research on measurement and modeling of land-atmosphere interactions, with emphasis on soil moisture remote sensing and application of advanced computational technologies for offline

and coupled land surface modeling. Projects include membership on the PMM science team, transitioning the award-winning Land Information System (LIS; <http://lis.gsfc.nasa.gov>) for research and applications with partners at the Air Force Weather Agency, NOAA/NCEP, USACE, USDA, and NWS/OHD and a NASA ESTO/AIST-funded project with Dr. W-K Tao in which LIS has been coupled to mesoscale (WRF) and cloud resolving (GCE) models.

GS-13 Physical Scientist, NASA/GSFC Hydrological Sciences Branch
September, 2001 – August, 2004

Assistant Professor School of Civil and Environmental Engineering, Georgia Institute of Technology,
January 1997-August 2001 (on leave 2001-2002).

Duties: Taught senior level class CEE4210 (Formerly CE4353): Hydrology and graduate level class CEE6221 (Formerly CE 6374): Physical Hydrology. Conducted independent research program on measurement and modeling of land-atmosphere interactions.

Research Assistant Water Resources Program, Department of Civil Engineering and Operations Research, Princeton University, Princeton, New Jersey.
July 1991-November 1996.

Duties: Conducted research on the effect of land surface heterogeneity on land-atmosphere interactions and analysis of error in rain gauge measurement of rainfall. Participated in four NASA/USDA field experiments to collect soil moisture, land cover, and atmospheric data for hydrologic-atmospheric model. Analyzed spatial structure and scaling properties of land cover data and distributed model output.

Teaching Assistant Department of Civil Engineering and Operations Research, Princeton University.

Duties: Held weekly problem sessions and graded biweekly homework and midterm exam for class of 60 students "CIV 303: Environmental Studies" Professor: Peter Jaffe. February-May 1993.

Hydrologic Technician United States Geological Survey, Water Resources Division, Reston, Virginia.

Duties: Digitized and constructed domains for hydrodynamic modeling using geographic information system ARC/INFO. May-August 1990.

Hydrologic Technician United States Geological Survey, Water Resources Division, Richmond, Virginia.

Duties: Digitized and constructed domain for regional groundwater model of Virginia coastal plain using geographic information system ARC/INFO. May-August, December 1989.

III. REFEREED PUBLICATIONS

Articles in Refereed Archival Journals (Reverse Chronological Order)

1. Kumar, S. V., Peters-Lidard, C. D., Santanello, J., Harrison, K., Liu, Y., and Shaw, M., 2012: Land surface Verification Toolkit (LVT) – a generalized framework for land surface model evaluation, *Geosci. Model Dev. Discuss.*, 5, 229-276, doi:10.5194/gmdd-5-229-2012.
2. Kumar, S., R. H. Reichle, K. W. Harrison, C. D. Peters-Lidard, S. Yatheendradas, and J. A.

- Santanello, 2012: A comparison of methods for a priori bias correction in soil moisture data assimilation, *Water Resour. Res.*, doi:10.1029/2010WR010261, in press.
3. Tao, W.-K., J. J. Shi, P.-L. Lin, J. Chen, S. Lang, M.-Y. Chang, M.-J. Yang, C.-C. Wu, C. Peters-Lidard, C.-H. Sui, and C.-D. Jou, 2011: High-Resolution Numerical Simulation of Typhoon Morakot. Part I: The Impact of Microphysics and PBL Parameterizations, *Special Issue on Typhoon Morakot, Terrestrial, Atmospheric and Oceanic Sciences (TAO)*, 22(6)(2011/12/01), 140 -163.
 4. Wood, E. F., et al., 2012: Reply to comment by Keith J. Beven and Hannah L. Cloke on "Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water", *Water Resour. Res.*, 48, W01802, doi:10.1029/2011WR011202.
 5. Peters-Lidard, C.D, S.V. Kumar, D.M. Mocko, Y. Tian, 2011: Estimating evapotranspiration with land data assimilation systems, *Hydrological Processes*, 25(26), 3979--3992, doi: 10.1002/hyp.8387
 6. Kirschbaum, D. B., R. Adler, Y. Hong, S. Kumar, C. Peters-Lidard, A. Lerner-Lam, 2011: Advances in landslide hazard forecasting: Evaluation of a global and regional modeling approach, *Environmental Earth Sciences*, in press, doi: 10.1007/s12665-011-0990-3.
 7. Wood, E. F., J. K. Roundy, T. J. Troy, R. van Beek, M. Bierkens, E. Blyth, A. de Roo, P. Doell, M. Ek, J. Famiglietti, D. Gochis, N. van de Giesen, P. Houser, P. R. Jaffe, S. Kollet, B. Lehner, D. P. Lettenmaier, C. Peters-Lidard, M. Sivapalan, J. Sheffield, A. Wade, and P. Whitehead , 2011: Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water, *Water Resour. Res.*, 47, W05301, doi:10.1029/2010WR010090.
 8. Santanello, J.A., C.D. Peters-Lidard and S.V. Kumar, 2011: Diagnosing the sensitivity of local land-atmosphere coupling via the soil moisture boundary layer interaction. *Journal of Hydrometeorology*, 12, 766--786. doi:10.1175/JHM-D-10-05014.1
 9. Tao, Wei-Kuo, Jaiann Jong Shi, Shuyi S. Chen, Stephen Lang, Pay-Liam Lin, Song-You Hong, Christa Peters-Lidard and Arthur Hou, 2011: The impact of microphysical schemes on hurricane intensity and track. *Asia-Pacific Journal of Atmospheric Sciences*, 47(1), 1-16, doi: 10.1007/s13143-011-1001-z.
 10. Tian, Yudong, Christa D. Peters-Lidard, John B. Eylander, 2010: Real-Time Bias Reduction for Satellite-Based Precipitation Estimates. *J. Hydrometeor*, 11, 1275–1285, doi: 10.1175/2010JHM1246.1
 11. Pan, Feifei, Christa D. Peters-Lidard, and Anthony W. King, 2010: Inverse Method for Estimating the Spatial Variability of Soil Particle Size Distribution from Observed Soil Moisture, *J. Hydrologic Engrg.* 15, 931, doi:10.1061/(ASCE)HE.1943-5584.0000274.
 12. Shi, J. J., W-K. Tao, T. Matsui, R. Cifelli, A. Hou, S. Lang, A. Tokay, N-Y. Wang, C. Peters-Lidard, G. Skofronick-Jackson, S. Rutledge, and W. Petersen, 2010: WRF Simulations of the 20–22 January 2007 Snow Events over Eastern Canada: Comparison with In Situ and Satellite Observations. *J. Appl. Meteor. Climatol.*, 49, 2246–2266, doi: 10.1175/2010JAMC2282.1.
 13. Tian, Y., and C. D. Peters-Lidard, 2010: A global map of uncertainties in satellite-based precipitation measurements, *Geophys. Res. Lett.*, 37, L24407, doi:10.1029/2010GL046008.
 14. Tian, Yudong, Christa D. Peters-Lidard, Robert F. Adler, Takuji Kubota, Tomoo Ushio, (2010), Evaluation of GSMaP Precipitation Estimates over the Contiguous United States. *J. Hydrometeor*, 11, 566–574, doi: 10.1175/2009JHM1190.1.
 15. Dong, Jiarui and Christa Peters-Lidard, 2010: On the Relationship Between Temperature and MODIS Snow Cover Retrieval Errors in the Western U.S., *IEEE J. Selected Topics in Applied Earth Observations and Remote Sensing*, , 3(1), 132-140, doi: 10.1109/JSTARS.2009.2039698.
 16. Tian, Y., C. D. Peters-Lidard, J. B. Eylander, R. J. Joyce, G. J. Huffman, R. F. Adler, K. Hsu, F. J. Turk, M. Garcia, and J. Zeng, 2009: Component analysis of errors in satellite-based precipitation estimates, *J. Geophys. Res.*, 114, D24101, doi:10.1029/2009JD011949.
 17. Kumar, Sujay V., Rolf H. Reichle, Randal D. Koster, Wade T. Crow, Christa D. Peters-Lidard,

- 2009: Role of subsurface physics in the assimilation of surface soil moisture observations, *J. Hydrometeor.*, 10: 1534-1547 doi:10.1175_2009JHM1134.1.
18. Santanello Jr., J.A., C. D. Peters-Lidard, S. V. Kumar, C. Alonge, and W.-K. Tao, 2009: A Modeling and Observational Framework for Diagnosing Local Land-Atmosphere Coupling on Diurnal Time Scales. *J. Hydrometeor.*, 10(3), 577-599, doi:10.1175/2009JHM1066.1.
 19. Bounoua, L., A. Safia, J. Masek, C. Peters-Lidard, and M.L. Imhoff, 2009: Impact of Urban Growth on Surface Climate: A Case Study in Oran, Algeria. *J. Appl. Meteor. Climatol.*, 48, 217-231, doi: 10.1175/2008JAMC2044.1.
 20. Case, J.L., W.L. Crosson, S.V. Kumar, W.M. Lapenta, and C.D. Peters-Lidard, 2008: Impacts of High-Resolution Land Surface Initialization on Regional Sensible Weather Forecasts from the WRF Model. *J. Hydrometeor.*, 9, 1249-1266, doi: 10.1175/2008JHM990.1.
 21. Tao, W.K., J.D. Chern, R. Atlas, D. Randall, M. Kharoutdinov, J.L. Li, D.E. Waliser, A. Hou, X. Lin, C. Peters-Lidard, W. Lau, J. Jiang, and J. Simpson, 2009: A Multiscale Modeling System: Developments, Applications, and Critical Issues. *Bull. Amer. Meteor. Soc.*, 90, 515-534, doi: 10.1175/2008BAMS2542.1.
 22. Kumar, Sujay V., Rolf H. Reichle, Christa D. Peters-Lidard, Randal D. Koster, Xiwu Zhan, Wade T. Crow, John B. Eylander, and Paul R. Houser, 2008. A Land Surface Data Assimilation Framework using the Land Information System: Description and Applications, *Adv. Water Resour.*, 31(11), 1419-1432, doi:10.1016/j.advwatres.2008.01.013.
 23. Kumar, S., C. Peters-Lidard, Y. Tian, R. Reichle, J. Geiger, C. Alonge, J. Eylander, and P. Houser, 2008: An Integrated Hydrologic Modeling and Data Assimilation Framework, *Computer*, 41(12)52-59, doi: 10.1109/MC.2008.475.
 24. Tian, Y., C. D. Peters-Lidard, S. V. Kumar, J. Geiger, P. R. Houser, J. L. Eastman, P. Dirmeyer, B. Doty, and J. Adams, 2008. High-performance land surface modeling with a Linux cluster. *Comput. Geosci.* 34, 11, 1492-1504, doi: 10.1016/j.cageo.2007.12.014
 25. Peters-Lidard C. D., D. M. Mocko, M. Garcia, J. A. Santanello Jr., M. A. Tischler, M. S. Moran, Y. Wu (2008), Role of precipitation uncertainty in the estimation of hydrologic soil properties using remotely sensed soil moisture in a semiarid environment, *Water Resour. Res.*, 44, W05S18, doi:10.1029/2007WR005884.
 26. Garcia M., C. D. Peters-Lidard, D. C. Goodrich, 2008: Spatial interpolation of precipitation in a dense gauge network for monsoon storm events in the southwestern United States, *Water Resour. Res.*, 44, W05S13, DOI:<http://dx.doi.org/10.1029/2006WR005788>.
 27. Kumar, S., C. D. Peters-Lidard, J.L. Eastman, and W. Tao, 2008. An Integrated High Resolution Hydrometeorological Modeling Testbed using LIS and WRF, *Environmental Modelling & Software*, 23(2), 169-181, DOI= <http://dx.doi.org/10.1016/j.envsoft.2007.05.012>.
 28. Pan, Feifei and Christa D. Peters-Lidard, 2008: On the Relationship Between Mean and Variance of Soil Moisture Fields. *Journal of the American Water Resources Association (JAWRA)* 44(1):1-8. DOI: 10.1111/j.1752-1688.2007.00150.x
 29. Thoma, D.P., M.S. Moran, R. Bryant, M.M. Rahman, C.D. Holifield Collins, T.O. Keefer, R. Noriega, I. Osman, S.M. Skrivin, M.A. Tischler, D.D. Bosch, P.J. Starks and C.D. Peters-Lidard, 2008: Appropriate scale of soil moisture retrieval from high resolution radar imagery for bare and minimally vegetated soils. *Remote Sensing of Environment*, 112(2), 403-414, DOI=<http://dx.doi.org/10.1016/j.rse.2007.06.021>.
 30. Jin, Menglin, J. Marshall Shepherd, and Christa Peters-Lidard, 2007: Development of a parameterization for simulating the urban temperature hazard using satellite observations in climate model. *Natural Hazards*, 43(2), 257-271, DOI=<http://dx.doi.org/10.1007/s11069-007-9117-2>.
 31. Peters-Lidard, C. D., P. R. Houser, Y. Tian, S. V. Kumar, J. Geiger, S. Olden, L. Lighty, B. Doty, P. Dirmeyer, J. Adams, K. Mitchell, E.F. Wood, J. Sheffield, 2007: High Performance Earth System Modeling with NASA/GSFC's Land Information System. *Innovations in Systems and*

- Software Engineering, 3(3), 157-165, DOI=<http://dx.doi.org/10.1007/s11334-007-0028-x>.
32. Santanello, J.A., Jr., C. D. Peters-Lidard, M. Garcia, D. Mocko, M. Tischler, M.S. Moran, and D.P. Thoma, 2007: Using Remotely-Sensed Estimates of Soil Moisture to Infer Soil Texture and Hydraulic Properties across a Semi-arid Watershed, *Remote Sensing of Environment*, 110(1), 79-97, DOI=<http://dx.doi.org/10.1016/j.rse.2007.02.007>.
 33. Tian Y., C. D. Peters-Lidard (2007), Systematic anomalies over inland water bodies in satellite-based precipitation estimates, *Geophys. Res. Lett.*, 34, L14403, DOI=<http://dx.doi.org/10.1029/2007GL030787>.
 34. Tian, Y., C.D. Peters-Lidard, B.J. Choudhury, and M. Garcia, 2007: Multitemporal Analysis of TRMM-Based Satellite Precipitation Products for Land Data Assimilation Applications. *J. Hydrometeor.*, 8, 1165–1183.
 35. Tischler, M., Garcia, M., Peters-Lidard, C., Moran, M. S., Miller, S., Thoma, D., Kumar, S., and Geiger, J. 2007. A GIS framework for surface-layer soil moisture estimation combining satellite radar measurements and land surface modeling with soil physical property estimation. *Environ. Model. Softw.* 22 (6), 891-898, DOI= <http://dx.doi.org/10.1016/j.envsoft.2006.05.022>
 36. Zeng, X., W.-K. Tao, M. Zhang, S. Lang, C. Peters-Lidard, J. Simpson, S. Xie, S. Kumar, J. V. Geiger, C.-L. Shie, and J. L.. Eastman, 2007: Evaluation of long-term cloud-resolving modeling with observational cloud data. *J. Atmos. Sci.*, 64, 4153-4177, DOI=<http://dx.doi.org/10.1175/2007JAS2170.1>.
 37. Kumar, S. V., C. D. Peters-Lidard, Y. Tian, P. R. Houser, J. Geiger, S. Olden, L. Lighty, J. L. Eastman, B. Doty, P. Dirmeyer, J. Adams, K. Mitchell, E. F. Wood and J. Sheffield, 2006. Land Information System - An Interoperable Framework for High Resolution Land Surface Modeling. *Environmental Modelling & Software*, 21, 1402-1415, DOI=<http://dx.doi.org/10.1016/j.envsoft.2005.07.004>.
 38. Krajewski W. F., et al. (2006), A remote sensing observatory for hydrologic sciences: A genesis for scaling to continental hydrology, *Water Resour. Res.*, 42, W07301, DOI=<http://dx.doi.org/10.1029/2005WR004435>.
 39. Lawford, R., M. Bosilovich, S. Eden, S. Benedict, C. Brown, A. Gruber, P. Houser, K. Hsu, J. Huang, W. Lau, T. Meyers, K. Mitchell, C. Peters-Lidard, J. Roads, M. Rodell, S. Sorooshian, D. Tarpley, and S. Williams, 2006: U.S. Contributions to the CEOP. *Bull. Amer. Meteor. Soc.*, 87, 927–939, DOI=<http://dx.doi.org/10.1175/BAMS-87-7-927>.
 40. Pielke, Roger A., Sr, Toshihisa Matsui, Giovanni Leoncini, Timothy Nobis, Udaysankar S. Nair, Er Lu, Joseph Eastman, Sujay Kumar, Christa D. Peters-Lidard, Yudong Tian, and Robert L Walko, 2006: A New Paradigm for Parameterizations in Numerical Weather Prediction and other Atmospheric Models. *National Weather Digest*, 30, 93-99.
 41. Moran, M.S., C.D. Peters-Lidard, J.M. Watts, and S. McElroy, 2004. Estimating soil moisture at the watershed scale with satellite-based radar and land surface models, *Canadian J. Rem. Sens.* 30:1-22.
 42. Pan, F., C. D. Peters-Lidard, M. J. Sale, and A. W. King, 2004. A comparison of geographical information systems-based algorithms for computing the TOPMODEL topographic index, *Water Resour. Res.*, 40, W06303, doi:[10.1029/2004WR003069](http://dx.doi.org/10.1029/2004WR003069).
 43. Pan, F.; C. D. Peters-Lidard and M. J. Sale, 2003. An analytical method for predicting surface soil moisture from rainfall observations. *Water Resour. Res.*, Vol. 39, No. 11, 1314. [10.1029/2003WR002142](http://dx.doi.org/10.1029/2003WR002142)
 44. Bradley, A. A., C. D. Peters-Lidard, B. R. Nelson, J. A. Smith, and C. B. Young, 2002. Raingage Network Design Using NEXRAD Precipitation Estimates. *J. Am. Water Resour. Assoc.*, **38**, No 5, 1393-1407.
 45. Peters-Lidard, C. D., F. Pan, and E. F. Wood, 2001. A re-examination of modeled and measured soil moisture spatial variability and its implications for land surface modeling. *Adv. Water Resources* (Special Issue on Non-Linear Propagation of Multi-scale Dynamics Through

- Hydrologic Subsystems), **24** (9-10), 1069-1083.
- 46. Peters-Lidard, C. D. and L. H. Davis, 2000: Regional Flux Estimation in a Convective Boundary Layer Using a Conservation Approach. *J. Hydrometeorology*, **1**, 170-182.
 - 47. Young, C. B., B. R. Nelson, A. A. Bradley, J. A. Smith, C. D. Peters-Lidard, A. Kruger and M. L. Baeck, 1999: An Evaluation of NEXRAD Precipitation Estimates in Complex Terrain. *J. Geophys. Res.*, **104** (D16), 19,691-19,704.
 - 48. Peters-Lidard, C. D., E. Blackburn, X. Liang and E. F. Wood, 1998: The Effect of Soil Thermal Conductivity Parameterization on Surface Energy Fluxes and Temperatures: *J. Atmos. Sci.*, **55** (7), 1209-1224.
 - 49. Peters-Lidard, C. D., M. S. Zion and E. F. Wood, 1997: A soil-vegetation-atmosphere transfer scheme for modeling spatially variable water and energy balance processes, *J. Geophys. Res.*, **102** (D4), 4303-4324.
 - 50. Peters-Lidard, Christa D. and Eric F. Wood, 1994: Estimating storm areal average rainfall intensity in field experiments. *Water Resources Research*, **30** (7), pp. 2119-2131.

National Research Council Reports

- 1. Peters-Lidard, C. D. (with the Committee on Hydrologic Science) 1999: *Hydrologic Science Priorities for the U.S. Global Change Research Program: An Initial Assessment*, Washington, DC, National Academy Press, 32pp.

IV. HONORS AND AWARDS

Fellow, American Meteorological Society, 2012
Arthur S. Flemming Award, 2007
NASA Software of the Year Award for the Land Information System, 2005
NASA/GSFC Laboratory for Hydrospheric and Biospheric Processes Outstanding Achievement, 2005
Committee on Space Research (COSPAR) Commission A Zeldovich Medal, 2004
NASA/GSFC Performance Awards, 2003-2009
NASA/GSFC Special Act Award, 2002
NASA/ASEE Summer Faculty Fellow at GSFC, 1997
George Van Ness Lothrop Honorific Fellowship in Engineering (Princeton), 1995-1996
National Science Foundation Graduate Fellow, 1992-1995
Phi Beta Kappa, 1991
Department of Geological Sciences Outstanding Senior Award (Virginia Tech), 1991
Mortar Board National Senior Honor Society, 1990
Phi Kappa Phi National Honor Society, 1990
Order of Omega Greek Honorary, 1989
Golden Key National Honor Society, 1989
Distinguished University Scholarship (Virginia Tech), 1987-1991

V. PROFESSIONAL SERVICE

A. NATIONAL AND INTERNATIONAL CONTRIBUTIONS

Editorships

Associate Editor, Journal of Hydrology, 2008-present.

Editor, Journal of Hydrometeorology, 2004-2007.
Associate Editor, Water Resources Research, 2002-2003.

Technical Committee Activities

American Meteorological Society

Councilor, 2012-present
Chair, Committee on Hydrology, 2002-present.
Member, Committee on Hydrology, 1998-present.
Annual Meeting Oversight Committee, 2009-present.

American Geophysical Union

Chair, Hydrological Sciences Early Career Award Committee, 2011-present
Member, Committee on Precipitation, 1997-2002.
Member, Committee on Remote Sensing, 1997-present.

National Research Council

Member, Committee on Hydrologic Science, 1999-2001.

US Global Change Research Program

Member, Water Cycle Science Steering Group, 2002-present.

CLIVAR (WCRP International Research Program on Climate Variability and Predictability)

Member, Pan American Implementation Panel, 2003-present.

GEWEX (WCRP Global Energy and Water Cycle Experiment)

Member, GLASS Panel, 2004-present.

Organization and Chairmanship of Technical Sessions and Workshops

1. Chair, 19th Conference on Hydrology, American Meteorological Society, Long Beach, CA 2005.
2. Chair, 18th Conference on Hydrology, American Meteorological Society, Long Beach, CA 2004.
3. Chair, 17th Conference on Hydrology, American Meteorological Society, Long Beach, CA 2003.
4. American Institute of Hydrology (AIH) 2000 Annual Meeting and International Conference, Special Session on Atmospheric, Surface and Subsurface Hydrology and Interactions, November 5-8, 2000, Research Triangle Park, North Carolina.
5. American Meteorological Society 15th Conference on Hydrology (9-14 January, 2000), “Session 2: Data, Modeling and Analysis in Hydrometeorology Part II”.
6. American Geophysical Union Fall Meeting (December 13-17, 1999), Hydrology Section Sessions H51B and H52G: “Validation of Remotely Sensed Data for Land Surface Hydrology Applications I and II”.
7. American Meteorological Society 14th Conference on Hydrology (10-15 January, 1999), Joint Session J7: Boundary Layer Studies During the SGP97 and CASES Programs (Joint with 13th Symposium on Boundary Layers and Turbulence)
8. American Geophysical Union Spring Meeting (May 26-29, 1998), Hydrology Section Session H03: “The Southern Great Plains 1997 (SGP97) Hydrology Experiment”.

B. NASA CONTRIBUTIONS

Earth Sciences Division Activities

- Co-Chair for Terrestrial Water Cycle cross-cutting theme (with Randy Koster), 2006-present

Directorate Activities

- Chair of Science Science Director's Women's and Minorities Forum, 2008-2011.

NASA Activities

- Member, NASA Inventions and Contributions Board, 2007-present

VI. EDUCATION AND OUTREACH

A. POST-DOCTORAL AND VISITING SCIENTIST ADVISEMENT

NASA Postdoctoral Associates

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
Sujay Kumar, Ph.D.	2002-present	SAIC
Yudong Tian, Ph.D.	2002-present	UMBC/GEST
Yihua Wu, Ph.D.	2002-2007	GEST
Joseph Santanello, Ph.D.	2006-2009	UMCP/ESSIC
Bailing Li, Ph.D.	2007-2008	SAIC
Jiarui Dong, Ph.D.	2007-2009	UMBC/GEST
Soni Yatheendradas, Ph.D.	2008-present	UMCP/ESSIC
Kenneth Harrison, Ph.D.	2008-present	UMCP/ESSIC
Jing "Lily" Zeng, Ph.D.	2007-2010	ERT
Anil Kumar, Ph.D.	2009-present	UMCP/ESSIC

NASA M.S. Level Associates

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
Matthew Garcia	2004-2008	UMBC/GEST
Charles Alonge	2005-2008	SAIC
David Mocko	2004-present	SAIC

NASA Faculty Fellows

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
Prof. Mahmood Nachabe	2002	University of South Florida, Civil Engineering

B. GRADUATE STUDENT ADVISEMENT**Georgia Tech Ph.D. Students Advised**

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
Feifei Pan, Ph.D.	1997-2002	Postdoctoral Associate, Oak Ridge National Lab

Ph.D. Guidance/Examining Committees

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
George McMahon	1997-1999	Georgia Tech, CEE (Dr. M. Meyer)
Kelly Brumbelow	1997-2001	Georgia Tech, CEE (Dr. A. Georgakakos)
Shikha Rahman	2000-2002	Georgia Tech, CEE (Dr. D. Webster)
Malek Abu-Ruman	1998-2004	Georgia Tech, CEE (Dr. A. Georgakakos)
Stephen Bourne	1998-2004	Georgia Tech, CEE (Dr. A. Georgakakos)
Tahirih Lackey	1998-2004	Georgia Tech, CEE (Dr. F. Sotiropoulos)
Orhan Gunduz	1999-2002	Georgia Tech, CEE (Dr. M. Aral)
Allison Steiner	2001-2003	Georgia Tech, EAS (Dr. W. Chamedies)
Carlo DeMarchi	2001-2006	Georgia Tech, CEE (Dr. A. Georgakakos)

Georgia Tech M.S. Thesis Students Advised

<u>Name</u>	<u>Dates</u>	<u>Affiliation</u>
Luke Davis, MSCE	1997-1999	Consultant, PriceWaterhouseCoopers
Brian Keel, MSCE	1999-2001	Engineer, Camp, Dresser and McKee
Adam Stewart, MSCE	2000-2001	Engineer, Jordan, Jones and Goulding

NASA Graduate Research Advised

<u>Name</u>	<u>Dates</u>	<u>Program</u>	<u>School and Program</u>
Eylon Shamir	2002	GSSP	U. Arizona, Hydrology and Water Resources

1. UNDERGRADUATE STUDENT ADVISEMENT

Georgia Tech Undergraduate Research Advised

Lois Boxill	Raingauge Network Design for the Catskill Mountains, Winter, Spring 1998
Richard Gruel	Hydrologic Modeling of the New York City Watersheds, Spring, 1998
Katherine McLeod	Hydrologic Modeling of the Cannonsville Watershed, Spring, 1998
Amy Schack	GIS Based Applied Hydrology, Winter, 1999
Christopher Owen	Hydrology Field Methods, Spring, 1999
Breton Peterson	Hydrology Field Methods, Spring, 1999
M. Chad Jacobs	Measurement and Modeling of Soil Water and Temperature Profiles, Fall, 1999
Sara Henry	GIS-Based Approaches for Wetlands Siting, Fall, 1999
Sally Barton	GIS-based Hydrologic-Atmospheric Modeling, Spring, Summer, 2001
Kelly Linder	GIS-based Hydrologic-Atmospheric Modeling, Spring, 2001

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Miguel Roman	Modeling Urban Land-Atmosphere Interactions, Summer 2003
Uttam Majumder	Design and Construction of the Land Information Systems Beowulf Cluster, Summer 2002
Nikkia Anderson	Design and Construction of the Land Information Systems Beowulf Cluster, Summer 2002